

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) An image display apparatus comprising:
an imaging section which converts an optical image to signals,
said imaging section including:

photoelectronic conversion devices arranged in the form of a
matrix,

vertical transfer paths arranged adjacent to the respective
columns of said photoelectronic conversion devices, each of said
vertical transfer paths transfers signal charges toward a lower end
in accordance with vertical driving pulses supplied from the
outside,

transfer gates for transferring signal charges generated by
said photoelectronic conversion devices to the respective vertical
transfer paths in accordance with field shift pulses supplied from
the outside respectively, and

output circuits for converting signal charges arrived at the
lower ends of said vertical transfer paths to signals and
outputting the signals in parallel column by column of said matrix,
such that said imaging section outputs signals representing an
image without horizontally transferring signal charges provided by
said vertical transfer paths; and

a display section which displays an image,
said display section including:

display devices arranged in the form of a matrix, each of said display devices has a signal input terminal and a control signal input terminal, and displays an image represented by signals applied to the signal input terminal thereto at the time of application of driving pulses to the control signal input terminal,

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input circuits for receiving signals output from said imaging section in parallel column by column and outputting signals corresponding the received signals to the signal input terminals of said display devices via signal buses in parallel column by column of said matrix, and

a vertical driving circuit for outputting the driving pulses to the control signal input terminals of said display devices via control buses line by line of said matrix in a predetermined order.

2. (Original) The image display apparatus according to claim 1, wherein said imaging section comprises a CCD imaging device or a MOS imaging device.

3. (Original) The image display apparatus according to claim 1, wherein said display section comprises a liquid crystal display.

4. (Currently Amended) An image display apparatus comprising: an imaging section which converts an optical image to signals,

said imaging section including:

photoelectronic conversion devices arranged in the form of a matrix,

vertical transfer paths arranged adjacent to the respective columns of said photoelectronic conversion devices, each of said vertical transfer paths transfers signal charges toward a lower end in accordance with vertical driving pulses supplied from the outside,

transfer gates for transferring signal charges generated by said photoelectronic conversion devices to the respective vertical transfer paths in accordance with field shift pulses supplied from the outside respectively, and

output circuits for converting signal charges arrived at the lower ends of said vertical transfer paths to signals and outputting the signals in parallel column by column of said matrix, such that said imaging section outputs signals representing an image without horizontally transferring signal charges provided by said vertical transfer paths;

a signal conversion section for performing a processing for the signals output from said imaging section in parallel column by column and outputting the processed signals in parallel; and

a display section which displays an image,

said display section including:

display devices arranged in the form of a matrix, each of said display devices has a signal input terminal and a control signal input terminal, and displays an image represented by signals applied to the signal input terminal thereto at the time of application of driving pulses to the control signal input terminal,

input circuits for receiving signals output from said signal conversion section in parallel and outputting signals corresponding the received signals to the signal input terminals of said display devices via signal buses in parallel column by column of said matrix, and

Don't a vertical driving circuit for outputting the driving pulses to the control signal input terminals of said display devices via control buses line by line of said matrix in a predetermined order.

5. (Original) The image display apparatus according to claim 4, wherein said imaging section comprises a CCD imaging device or a MOS imaging device.

6. (Original) The image display apparatus according to claim 4, wherein said display section comprises a liquid crystal display.

7. (Previously Presented) The image display apparatus according to claim 4, further comprising:

a parallel-to-serial conversion section for converting the signals output in parallel from said signal conversion section to serial signals.

8. (Currently Amended) An image display apparatus comprising:

an imaging section which converts an optical image to signals, said imaging section including:

photoelectronic conversion devices arranged in the form of a matrix,

Don't vertical transfer paths arranged adjacent to the respective columns of said photoelectronic conversion devices, each of said vertical transfer paths transfers signal charges toward a lower end in accordance with vertical driving pulses supplied from the outside,

transfer gates for transferring signal charges generated by said photoelectronic conversion devices to the respective vertical transfer paths in accordance with field shift pulses supplied from the outside respectively, and

output circuits for converting signal charges arrived at the lower ends of said vertical transfer paths to signals and outputting the signals in parallel column by column of said matrix, such that said imaging section outputs signals representing an

image without horizontally transferring signal charges provided by
said vertical transfer paths;

a signal conversion section for performing a processing for the signals output in parallel from said imaging section column by column and outputting the processed signals in parallel; and

a parallel-to-serial conversion section for converting the signals output in parallel from said signal conversion section to serial signals.

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9. (Original) The image display apparatus according to claim 8, wherein said imaging section comprises a CCD imaging device or a MOS imaging device.

10. (Previously Presented) A display apparatus comprising:
a serial-to-parallel conversion section for converting signals serially input thereto to parallel signals and outputting the signals;

a signal conversion section for performing a processing for the signals output in parallel from said serial-to-parallel conversion section column by column and outputting the processed signals in parallel; and

a display section which displays an image,
said display section including:

display devices arranged in the form of a matrix, each of said display devices has a signal input terminal and a control signal input terminal, and displays an image represented by signals applied to the signal input terminal thereto at the time of application of driving pulses to the control signal input terminal,

Disc input circuits for receiving signals output from said signal conversion section in parallel and outputting signals corresponding the received signals to the signal input terminals of said display devices via signal buses in parallel column by column of said matrix, and

a vertical driving circuit for outputting the driving pulses to the control signal input terminals of said display devices via control buses line by line of said matrix in a predetermined order.

11. (Original) The display apparatus according to claim 10, wherein said display section comprises a liquid crystal display.

12. (New) The image display apparatus according to claim 2, wherein said imaging section comprises a CCD imaging device with no horizontal transfer path.

13. (New) The image display apparatus according to claim 5, wherein said imaging section comprises a CCD imaging device with no horizontal transfer path.

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14. (New) The image display apparatus according to claim 9, wherein said imaging section comprises a CCD imaging device with no horizontal transfer path.
